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EXAMINER	
MA, CALVIN	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/669,508	AZAMI ET AL.	
	Examiner	Art Unit	
	CALVIN C. MA	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 February 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-32* is/are pending in the application.

4a) Of the above claim(s) *2-3,10-11, 17-18, and 24-31* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 4, 5-9, 12-16, 19-23 and 32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 4, 7, 9, 12, 15-16, 19, 22-23 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okazaki (US Patent: 5,666,555) in view of Suzuki et al. (US Patent: 5,736,982)

As to claim 1, Okazaki discloses a multichannel information processing device (i.e. the multiple video signal coming into the system like VTR and LD) (see Fig. 1, Col. 2, Lines 41-57) wherein a plurality of video images are displayed simultaneously on a display device (i.e. multiple windows on the display screen of the computer displaying separate video signals) (see Fig. 1, Col. 2, Lines 58-68), comprising:

video image information control means (103 CPU) for acquiring information for said plurality of video images, and for deciding video image position information relating to display positions on a display device (108) for said plurality of video images (i.e. images coming from 101 image reproduction

apparatus) and outputting said information for a plurality of video images based on said video image position information (i.e. since the CPU process the video image information and assign these information on to a plurality of windows on the Bit Map Display 108, it must assign a position value for each of the windows in order to display the each of the video images correctly) (see Fig. 1, Col. 2, Lines 58-68);

cursor position control means (103 CPU) for calculating cursor position information based on cursor instructions information input via an input device (i.e. key board 111, pointing device 105) and generating and outputting cursor image information based on said cursor position information (i.e. since the cursor is generated by the IOP 104 and controlled and processed by the CPU 103 when user input devices 105 is activated the cursor must be calculated by the CPU in order to allow the position value to be properly accessed and utilized for the selection of the various windows) (see Fig. 1, Col. 3, Lines 5-12);

display image generating means (106) for synthesizing information for the plurality of video images output by said video image display control means (103) and cursor image information output by the cursor position control means (103) and displaying the same on said display device (i.e. since the multiple video images are display on the Bit Map Display 108 in forms of multiple windows and each of the window can be selected by the cursor to activate its audio content, the video images are successfully synthesized and displayed) (see Fig 1, Col 2, Lines 41-68) ;

distance information generating means (CPU 103) for calculating distances between the display positions of said plurality of video images and a cursor display position based on the video image position information for said plurality of video images and the cursor position information calculated by said cursor position information control means, and generating distance information (i.e. since each of the windows are selectable by the cursor to activate its audio content the distance is therefore one or zero where if the cursor was found to be within the window it is zero and the audio is outputted and when the cursor is outside the window then the distance is 1 and no audio is outputted) (see Fig. 1, Col. 3, Lines 5-12);

and audio output control means (i.e. Audio Selector 102) for deciding volume of audio data for said plurality of video images based on the distance information generated by said distance information generating means, and outputting audio data to an output device(i.e. since when the distance is zero, where the cursor is found to be inside the window, then the corresponding audio of the video in the window is outputted at a preset volume, and when the distance is one, where the cursor is not inside the window the volume is zero and the audio is not outputted) (see Fig. 1, Col. 3, Lines 5-12).

However, Okazaki does not explicitly teach wherein said audio output control means sets volume of said audio data to one of multiple values so as to be in inverse proportion to distance values generated by said distance information generating means, synthesizes said audio data corresponding to said

plurality of video images displayed by said display image generating means, using said respective volumes, and outputs said synthesized audio data. Suzuki teaches wherein said audio output control means sets volume (i.e. the db loss according to the audio signal) of said audio data (i.e. audio data of the voice conversation) to one of multiple values so as to be in inverse proportion to distance values generated by said distance information generating means, synthesizes said audio data corresponding to said plurality of video images (i.e. since each avatar are displayed on the video display 10) (see Fig. 3) displayed by said display image generating means (12), using said respective volumes, and outputs said synthesized audio data (i.e. the avatar are displayed and the voices of the avatar are carried to the user according to the loss of dBs, where the farther the avatar is the lighter the volume) (see Suzuki, Fig. 3, 17, Col. 15, Lines 31-46).

Therefore it would have been obvious for one of ordinary skill in the art at the time the invention was made to have used the virtual space based audio processing system of Suzuki in the computing environment of Okazaki in order to provide a virtual space display method which lends realism to the virtual space auditorily (see Suzuki Col.1 Lines 53-55).

As to claim 16, Okazaki teaches a computer-readable recording medium (110) storing a program controlling a computer having a display device (108), an input device (111) and an audio output device (106) to execute a multichannel

information processing for displaying a plurality of video images simultaneously on the display device (i.e. the multiple windows on the screen each having video images displayed coming from the disk which store image data and audio data) (see Fig. 4, Col. 4, Lines 14-41), according to operations comprising:

deciding display positions on the display device for said video images to be displayed (i.e. since the computer CPU 103 process the video image data and output the data on to a plurality of display windows it necessary decide the positions that the video image takes up in order to properly display it on bit map display 108) (see Fig. 4, Col. 4, Lines 14-26);

outputting information for said plurality of video images based on the decided display positions (i.e. the CPU 103 sent the video images into the various windows on the bitmap display 108 based on the display address assigned) (see Fig. 4, Col. 4, Lines 14-34);

accepting cursor instructions information input from said input device (pointing device 105) (i.e. the pointing device 105 inputting the pointer information via the IOP 104 to the CPU 103) (see Fig. 4, Col. 4, Lines 47-58);

calculating cursor position information for displaying a cursor based on said cursor instructions information (i.e. the location of the pointer on the bitmap display 108 must be calculated to update the operation of the pointing device 105) (see Fig. 4, Col. 4, Lines 47-58);

generating cursor image information based on said cursor position information (i.e. the image of the pointer on the bitmap display 108 is outputted therefore it must be generated after the updates is made on the operations of the pointing device 105) (see Fig. 4, Col. 4, Lines 47-58);

synthesizing information for said plurality of video images and said cursor image information, generating a display image, and displaying the display image on said display device (i.e. the outputted screen synthesized image data is output as an image signal to the bit map display 108 via the D/A converter 305, and since the pointer is present is must be synthesized also) (see Fig. 4, Col. 4, Lines 20-27);

calculating distances between the display positions of said plurality of video images and the display position of said cursor and generating distance information (i.e. since the distance of the selected windows is zero (i.e. selection) for turning on, when the cursor is outside the parameter of a window it has a distance of one (i.e. non-selection), which is calculated based upon this position of the windows and the current pointer position) (see Fig. 4, Col. 4, Lines 46-63);

and deciding volume of audio data for said plurality of video images based on said distance information and outputting the audio data to the audio output device, wherein the deciding of the volume of the audio data (i.e. the volume of the audio of the video is selected based upon the cursor, where the window that is selected has the nominal value and the non-selected has a muted volume) (see Fig. 4, Col. 4, Lines 46-63).

However Okazaki does not explicitly teach setting the volume of said audio data for the plurality of video images to one of multiple values in inverse proportion to said distances; synthesizing said audio data corresponding to said plurality of video images, using said respective volumes; and outputting said synthesized audio data to the audio output device.

Suzuki teaches setting the volume of said audio data for the plurality of video images to one of multiple values in inverse proportion to said distances (i.e. setting the conversation volume with the dB change according to the distance away) (see Fig. 17, Col. 15, Lines 35-50); synthesizing said audio data corresponding to said plurality of video images, using said respective volumes (i.e. since the conversation are from various terminals and all of the conversation can be heard by the user, it is synthesized with a set volume) (see Fig. 2, Col. 5, Lines 1-8); and outputting said synthesized audio data to the audio output device (i.e. the audio output is sent to speaker) (see Fig. 3, Col. 5, Lines 10-17).

Therefore, the combination of Okazaki and Suzuki meets the limitation.

As to claim 19, note the discussion of claim 16 above, claim 19 differs form claim 16 only in the limitation of: generating direction information relating to direction of display position for each video image as seen from cursor display position; and outputting to said audio output device so that audio data corresponding to said plurality of video images is positioned at acoustic image

positions in the sound space of said audio output device in accordance with said distance information and said direction information.

Okazaki teaches generating direction information relating to direction of display position for each video image as seen from cursor display position (i.e. since the pointer value that is represented on the display 108 is in two direction x and y the video also has those direction since that is how a bitmap display receive the data and display it on screen) (see Fig. 4, Col. 4, Lines 46-63);

and outputting to said audio output device so that audio data corresponding to said plurality of video images is positioned at acoustic image positions in the sound space of said audio output device (speaker 108) in accordance with said distance information and said direction information (i.e. since the output the center selected audio data based on the pointer selection, it is in the sound space of the speaker as the data values that are outputted there) (see Fig. 4, Col. 4, Lines 46-63).

As to claim 23, note the discussion of claim 16 above, claim 23 is broader in scope than claim 16 and is rejected on the same ground.

As to claim 32, not the discussion of claim 16 above, claim 32 differs from claim 16 only in that claim 16 is a method claim and claim 32 is an apparatus claim and is regarded as previously discussed with respect to claim 16 above.

As to claim 4, Okazaki teaches a multichannel information processing device according to claim 1, wherein distance information generated by said distance information generating means (103) includes direction information relating to direction of video image display position as seen from cursor display position (i.e. since the windows on the screen have a two dimensional outlay x and y by which an input cursor is placed, the direction are accounted for during the calculation for the positional information of the window as compared to the cursor), and said audio output control means (102) makes output to an audio output device based on said distance information, so that audio data for said plurality of video images is positioned in the sound space formed by said audio output device (i.e. since each of the windows are selectable by the cursor to activate its audio content the distance is therefore one or zero where if the cursor was found to be within the window it is zero and the audio is outputted and when the cursor is outside the window then the distance is 1 and no audio is outputted. Also the audio signal of any windows must be in the sound space of the speaker 109 when it is outputted since it is the only audio output means in the system) (see Fig.1, Col. 3, Lines 5-12).

As to claim 7, Okazaki teaches multichannel information processing device according to claim 1, further including video image selecting means for selecting, based on a prescribed algorithm (i.e. since the video image reside in the windows on the screen and the window is selected by the cursor, an algorithm is used to determine the window that is selected and therefore the

video that is selected), a specified video image from among a plurality of video images displayed on said display device, wherein said audio output control means outputs to an audio output device audio data for the video image selected by said video image selecting means (i.e. since the audio and video signal are presented together when the window is selected, both the audio and video are output upon selection) (see Fig. 1, Col. 3, Lines 5-12).

As to claims 9, 12 and 15, these claims differ from claims 1, 4 and 7 only in that claim 1, 4 and 7 are apparatus claims, whereas claim 9, 12 and 15 are method claims. Thus, claims 9-12 and 15 are analyzed as previously discussed with respect to claims 1-4 and 7 above.

3. Claims 20-21, 5 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okazaki in view of Suzuki as applied to claims 1, 4, 7, 9, 12, 15-16, 19, 22-23 and 32, further in view of Yamagami (U.S. Patent 6,334,025).

As to claim 20, note the discussion of claim 16 above, Okazaki and Suzuki does not teach a step for voice-recognizing words included in audio data for said plurality of video images; a step for converting voice-recognized words into character data and outputting the same;

Yamagami teaches a step for voice-recognizing words included in audio data for said plurality of video images (i.e. the CPU 13 execute the audio recognition causing the result to be displayed in the display section 402); a step for converting voice-recognized words into character data and outputting the same (i.e. the CPU 13 execute the audio recognition causing the result to be displayed in the display section 402) (see Fig. 4, 9, Col. 10, Lines 5-23, Col. 12, Line 60 - Col. 13, Line 10);

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to combine the voice recognition capability of Yamagami to the multi-window display of Okazaki in order to allow a more efficient storage of the annotation of audio and video data (Yamagami, Col. 1, Lines 65-68).

As to claim 21, note the discussion of claim 16 and claim 20 above, claim 21 differs from claim 20 only in the addition of two addition steps:

calculating distance between the display position positions of said plurality of video images and said cursor position information and generating distance information;

selecting a specified video image from among the plurality of video images based on said distance information and outputting audio data of the selected video image to the audio output device;

Okazaki teaches calculating distances between the display position of said plurality of video images and display position of said cursor and generating

distances information (i.e. since the distance of the selected windows is zero (i.e. selection) for turning on, when the cursor is outside the parameter of a window it has a distance of one (i.e. non-selection), which is calculated based upon this position of the windows and the current pointer position) (see Fig. 4, Col. 4, Lines 46-63); selecting a specified video image from among the plurality of video images based on said distance information and outputting audio data of the selected video image to the audio output device (i.e. the audio data and the video data of the selected window is output to the bitmap display 108 and the speaker 109 based on the distance zero which is when the cursor is actually in the window selected) (see Fig. 4, Col. 4, Lines 46-63).;

As to claim 5, Okazaki teaches a multichannel information processing device according to claim 1, but does not teach voice data recognition means for recognizing words included in audio data for said plurality of video images, and character information display means for converting words recognized by said voice data recognition means into character data and displaying the same on said display device.

Yamagami teaches voice data recognition means (13 CPU) for recognizing words included in audio data for said plurality of video images, and character information display means (13 CPU) for converting words recognized by said voice data recognition means into character data and displaying the same on said display device (i.e. the CPU 13 execute the audio recognition

causing the result to be displayed in the display section 402) (see Fig. 4, 9, Col. 10, Lines 5-23, Col. 12, Line 60 - Col. 13, Line 10).

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to combine the voice recognition capability of Yamagami to the multi-window display of Okazaki.

As to claim 13, this claim differs from claim 5 only in that claim 5 is an apparatus claim, whereas claim 13 is a method claim. Thus, claim 13 is analyzed as previously discussed with respect to claim 5 above.

4. Claims 22, 6, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okazaki in view of Suzuki and further in view of Yamagami as applied to claims 20-21, 5 and 13 above, and further in view of Hilpert, Jr. et al. (U.S. Patent 6,469,712)

As for claim 22, note the discussion of claim 20 above, Yamagami does not explicitly teach a step for connecting to the Internet; a step for searching for related web sites on the Internet using a voice-recognized word as keyword;

Hilpert teaches a step for connecting to the Internet (i.e. Internet access program); a step for searching for related web sites (i.e. Net Search) on the Internet using key word (i.e. since the web browser is an extension to the conventional process data capability of an individual personal computer, it is

natural to use the web search capability to enhance the operation of the computer) (Col. 3, Line 50 – Col. 4, Line 50).

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to combine the web searching capability of Hilpert to the text recognition design of Yamagami, (i.e. having the text recognition process to be further enhanced by use of Internet search for more detailed information) in order to provide the user additional interactions with the images displayed to assist visually impaired users (Hilpert Col. 1, Lines 50-66).

As to claim 6, note the discussion of Claim 5, Yamagami does not explicitly teach Internet connection means, web site search means for searching for related web sites on the Internet and web site display means for displaying on said display device a web site found by said web site search means.

Hilpert teaches Internet connection means (i.e. Internet access program), web site search means (i.e. Net Search) for searching for related web sites on the Internet and web site display means for displaying on said display device a web site found by said web site search means (i.e. since the web browser is an extension to the conventional process data capability of an individual personal computer, it is natural to use the web search capability to enhance the operation of the computer) (Col. 3, Line 50 – Col. 4, Line 50).

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to combine the web searching capability of Hilpert to the text recognition design of Yamagami (i.e. having the text

recognition process to be further enhanced by use of Internet search for more detailed information).

As to claim 14, this claim differs from claim 6 only in that claim 6 is an apparatus claim, whereas claim 14 is a method claim. Thus, claim 14 is analyzed as previously discussed with respect to claim 6 above.

5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Okazaki in view of Suzuki and further in view of Tarabella (U.S. Patent 5,796,945).

As to claim 8, note the discussion of Claim 7, Okazaki does not explicitly teach video image selecting means switches to a different video image for selection whenever a prescribed length of time has passed.

Tarabella teaches video image selecting means switches to a different video image for selection whenever a prescribed length of time has passed (i.e. the video clip that is capable of being displayed can be controlled for the length of time that it is to be displayed before a change is to take place (see Col. 5, Lines 1-53).

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to combine the time based pre-set selection capability of Tarabella to the image selection system of Okazaki, in order to make

the computer display more productive during idle time (see Tarabella, Col. 2, Lines 5-13).

Response to Arguments

6. Applicant's arguments with respect to claim have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CALVIN C. MA whose telephone number is (571)270-1713. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chanh Nguyen can be reached on 571-272-7772. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Chanh Nguyen/
Supervisory Patent Examiner, Art Unit 2629

Calvin Ma
May 22, 2008